

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

U.S. Serial No. 09/870,377

Inventors: Nick J. Pudar

Title: VEHICLE RADIO SYSTEM WITH  
CUSTOMIZED ADVERTISING

*Filed via EFS*

Filed: May 30, 2001

Group Art Unit: 3622

Examiner: Jean D. Janvier

Attorney Docket: GP-304074

**APPEAL BRIEF**

Board of Patent Appeals and Interference  
US Patent and Trademark Office  
PO Box 1450  
Alexandria, Virginia 22313-1450

Dear Sir:

On November 10, 2009, Appellant filed a Notice of Appeal of the final rejection contained in the Office Action of June 10, 2009. This Appeal Brief is being filed in support of that appeal.

This appeal follows a prior appeal of these same claims 26-42 wherein the Board reversed the Examiner's rejections of those claims. Following the Board decision, the Examiner again rejected those claims using the same art, thereby necessitating this Appeal. Appellant respectfully requests Board action to again overturn the Examiner's rejection.

**(i) Real Party in Interest**

The real party in interest is General Motors LLC, the assignee of the patent application by virtue of a chain of title from the inventor. The assignee is a Michigan company having its principal place of business at 300 Renaissance Center, Detroit, Michigan 48265-3000.

**(ii) Related Appeals and Interferences**

There are no other pending appeals and/or interferences known to Appellant, his assignee, and/or legal representatives that will directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

A prior appeal in this same application, Appeal 2008-0410, was previously decided by the Board on April 30, 2008.

**(iii) Status of Claims**

Claims 26-42 stand rejected under 35 U.S.C. § 103(a). Claims 1-15 and 43-45 have previously been canceled. The rejection of claims 26-42 is being appealed.

**(iv) Status of Amendments**

No amendments have been made since the Office Action of June 10, 2009.

**(v) Summary of Claimed Subject Matter**

The subject matter of independent claim 26 is directed to a radio broadcast system 10 having a vehicle radio system 12 that receives radio broadcasts from a transmitting facility 14. (Fig. 1; Page 4, lines 19-21.) In general, the radio broadcast includes programming content along with intermittent advertising slots that are identified by markers. (Fig. 4; Page 4; lines 31-33.) The radio system 12 monitors the channel selected by the vehicle operator and, upon detecting one of these markers, it accesses a stored advertisement and inserts it into the advertising slot. (Figs. 4-6; Page 4, line 31 – Page 5, line 3.)

The radio system 12 includes a radio broadcast receiver 18, a vehicle radio 20, and an advertising control unit 24 having a recording device 28 which stores radio advertisements received from the radio broadcast receiver 18. (Fig. 1; Page 4, line 22 – Page 5, line 3.) The vehicle radio 20 has an input for receiving audio data and at least one output for providing audio signals representative of the received audio data. (Figs. 2-3; Page 7, lines 13-15.) A first one of the radio broadcast streams 62 includes radio advertisements 70 (Fig. 6; Page 10, lines 1-10) and a second one of the radio broadcast streams 60 includes audio (programming) content that contains intermittent advertising slots 66 (Figs. 4 and 5; Page 9, lines 2-5), each identified by a marker 68 contained with that broadcast stream 60. (Fig. 5; Page 9, lines 13-16.) The radio broadcast receiver 18 is coupled to the input of the vehicle radio 20 to provide the vehicle radio with the received audio content. (Fig. 2; Page 7, lines 13-15.) The advertising control unit 24 is connected to the radio broadcast receiver 18 to receive at least some of the radio advertisements contained in the first radio broadcast stream 62. (Fig. 1; Page 4, lines 25-29.)

Upon receipt of one of the markers 68 contained within the second broadcast stream, the advertising control unit 24 is operable to access one of the stored radio advertisements 70, with the accessed radio advertisement being inserted into the advertising slot 66 identified by the received marker 68 so that the accessed radio advertising is included within the audio content sent to the input of the vehicle radio 20. (Figs. 2, 4-6; Page 7, lines 3-9.)

Claim 31 depends from claim 26 and further recites that the radio broadcast receiver 18 is connected to the input of the vehicle radio 20 (Fig. 2; Page 7, lines 13-14) and wherein the advertising control unit 24 is operable to supply the accessed radio advertisement to the radio

broadcast receiver 18 for insertion into the audio content by the radio broadcast receiver. (Fig. 2; Page 7, lines 5-9.)

Claim 32 depends from claim 31, and further specifies that the radio broadcast receiver 18 is operable to provide the markers 68 to said advertising control unit 24 (Page 7, lines 3-6), and the advertising control unit 24 is operable in response to receiving one of the markers 68 to access one of the radio advertisements 70 and supply the accessed radio advertisement to the radio broadcast receiver 18. (Page 7, lines 5-9.)

Claim 33 depends from claim 26 and further recites that the radio broadcast receiver 18 is coupled to the input of the vehicle radio 20 by the advertising control unit 24 such that the first and second radio broadcast streams are sent by the radio broadcast receiver 18 to the advertising control unit 24 (Fig. 3; Page 8, lines 5-15). The advertising control unit 24 is operable to store on the recording device 28 at least some of the radio advertisements contained in the first radio broadcast stream (Fig. 3; Page 8, lines 18-19 and Page 4, lines 28-3). The advertising control unit 24 is further operable to monitor the second radio broadcast stream for the markers and to insert the accessed radio advertisement into one of the advertising slots following receipt of the marker that identifies that advertising slot. (Page 8, lines 19-22.)

Although the Appellant has provided the summary of claimed subject matter with references to specific embodiments of the invention to comply with the requirements set forth in the relevant provisions of 37 C.F.R., this summary has been provided to aid the Board in evaluating the appeal and is not intended to limit the meaning or definition of any terms in the claims.

**(vi) Grounds of Rejection to be Reviewed on Appeal**

The sole issue to be reviewed is whether the subject matter of claims 26-42 is unpatentable under 35 U.S.C. § 103(a) as being obvious over Dimitriadis in view of Hite.

(vii) **Argument**

**Rejection of Claims 26-42 Under 35 U. S. C. § 103(a)**

Claims 26-42 stand rejected under 35 U.S.C. § 103(a) as being obvious over Dimitriadis in view of Hite. Claim 26 is an independent claim and claims 27-42 each ultimately depend from claim 26. For purposes of this appeal, claims 27-30 and 34-42 are being grouped with independent claim 26 so that these dependent claims all stand or fall with claim 26. Dependent claims 31, 32, and 33 are each separately patentable and do not stand or fall with claim 26 for the reasons discussed further below.

**Claims 26-42 Should Not Have Been Rejected by the Examiner Following the Board Decision**

Before addressing the § 103 rejection on the merits, Appellant notes that this rejection follows a prior appeal on which the Board overturned a § 102 rejection of claims 26-41 based on Dimitriadis alone, and overturned a § 103 rejection of claim 42 on the basis of Dimitriadis and Hite. There were other claims involved in the appeal for which the Board either affirmed the Examiner's rejection or entered its own new ground of rejection based on Dimitriadis and Hite. Following this Decision on Appeal, Appellant sought to expeditiously conclude prosecution by canceling all claims for which the rejections had been sustained or new ones entered, and sought to obtain allowance of claims 26-42 for which the Board had reversed the Examiner and not entered a new ground of rejection. Instead, the Examiner again rejected these claims, necessitating this return to the Board.

With regard to the new § 103 rejection of claims 26-41 and the reconstituted § 103 rejection of claim 42 on the basis of Dimitriadis and Hite, Appellants respectfully submit that the rejections are improper because it is clearly implicit in the Decision on Appeal that the Board determined the invention of claims 26-42 to be patentable over Dimitriadis and Hite. After reversing the Examiner's rejection of claims 1-13, 16-19, and 21-41 under 35 U.S.C. § 102(b), the Board *sua sponte* considered patentability of these claims in view of a combination of Dimitriadis and Hite, and determined that, of these claims, 1-13, 16-19, and 21-25 were unpatentable over the two references. It therefore entered a new ground of rejection of these

claims based on the two references. Clearly implicit in this action is the unavoidable conclusion that the Board determined that claims 26-41 were not rendered obvious by the combination of Dimitriadis and Hite. That is, the Board clearly went beyond the Examiner's rationales and findings and made its own determination of patentability and obviousness and, in doing so, decided that claims 26-41 should not be rejected on the basis of these two references. Thus, Applicant submits that it is improper for the Examiner to now take action directly contrary to that Board determination. More egregious is the reconstituted rejection of claim 42 on the basis of these two references. That claim was already before the Board as being rejected under 35 U.S.C. § 103(a) on the basis of these two references and the rejection was overturned by the Board. Accordingly, it is improper for the Examiner, and it is Applicant's belief that the Examiner is without authority, to now re-reject the claim on the basis of those references.

The Examiner responded to the foregoing comments in the most recent Office Action by stating that "although the Board did not enter [a] new ground of rejection for claims 26-41, however [sic], the Board never concluded, contrary to the Appellant's findings, that Dimitriadis cannot be combined with Hite to render the claims obvious." The Examiner went on to state that the Board "never expressly and completely eliminated or ruled out" such a combination. Although no such absolute statement is contained in the Board decision (or would be expected to be contained in the decision), it is a fact that the Board decided to use the references to enter a new ground of rejection of some claims, but not others. And Appellant submits that the reasonable implication of that action is that the Board did conclude that those other claims (26-41) patentably define over the two references. Presumably, the Board considered Dimitriadis and Hite in their entirety and not simply portions cited by the Examiner while ignoring the disclosure in total. Therefore, the Board's *sua sponte* rejection over these references of other claims, coupled with its identification of a limitation from claim 26 missing from both references, clearly and fairly implies that it determined that claim 26 and its dependents were not obvious in view of the two references. The Examiner's view that the Board left open the question of obviousness of claims 26-41 in view of Dimitriadis and Hite suggests that the Examiner believes that either 1) the Board simply did not consider obviousness of those claims, or 2) that the Board considered obviousness only on the basis of a portion of one or both references, and not on the basis of the references in their entirety. Neither of these two

explanations seem credible on the record, but if either is correct, then clarification by the Board is respectfully requested.

To the contrary, the Board at Page 10, lines 12-17, of the Decision on Appeal identified a limitation of claim 26 that it indicated had not been shown to exist in Dimitriadis, and then, in reversing the § 103 rejection of claim 42, the Board stated at Page 13, lines 20-26, that nothing had been identified from Hite "which would have provided one of ordinary skill in the art reason to modify Dimitriadis' system to meet these limitations" from claim 26. Thus, clearly the Board did consider patentability of the independent claim 26 on the basis of the two references. Consequently, Appellant respectfully submits that the Examiner should not now be rejecting these claims on the basis of those references without at least demonstrating how the references teach or render obvious the limitations found missing by the Board. This was not done by the Examiner, as discussed below in the next section.

With regard to the re-rejection of claim 42 on the basis of Dimitriadis and Hite following the Board's reversal of this rejection, the Examiner asserts that the "Board simply dismissed the rejection because Dimitriadis does not anticipate claim 26." The Examiner appears to have determined that the Board did not consider Hite in its reversal of the § 103 rejection of claim 42. However, this is refuted by the above-quoted portion of the Decision on Appeal at Page 13, lines 23-25, where the Board indicated that it had not been directed to any teaching from Hite which, along with Dimitriadis, renders obvious the identified limitations from the base claim 26. Accordingly, Appellant respectfully submits that, given the Board's consideration and reversal of the rejection of claim 42 under § 103 on the basis of Dimitriadis and Hite, and that the Examiner has not shown any error in the Board's consideration, the Examiner is therefore incorrect in making this rejection and further is without authority to disregard the Board's decision as to that claim.

#### Claims 26-42 Patentably Define Over the Combination of Dimitriadis and Hite

As noted by Appellant in its last response filed January 30, 2009, and by the Board in its Decision on Appeal, Fig. 2 of Dimitriadis shows that it plays advertising in a manner different than that recited in claim 26, and the Examiner has not pointed to anything from Hite that would lead one skilled in the art to alter Dimitriadis' approach in the manner recited in claim 26. Thus,



no *prima facie* case of obviousness has been made out. Claim 26 recites, *inter alia*, that the "advertising control unit is operable to access one of the stored radio advertisements, with the accessed radio advertisement being inserted into the advertising slot identified by the received marker so that the accessed radio advertising is included within the audio content sent to the input of the vehicle radio." Thus, in the invention of claim 26, the audio content sent to the vehicle radio includes the received radio broadcast together with the inserted advertisement, whereas in Dimitriadis' system as shown in Fig. 2, the advertising is sent to the speaker amplifier 68 independently of the received voice broadcast. This difference has a practical advantage; namely, Applicant's system can be used with conventional integrated vehicle radio/speaker systems without requiring modification to provide an auxiliary input to the amplifier.

This distinction was expressly adopted by the Board in its reversal of the rejection of claim 26. See page 10, lines 1-21 of the Decision on Appeal. Moreover, as discussed above, in addressing the rejection of dependent claim 42 under 35 U.S.C. § 103(a), the Board noted that nothing had been shown from Hite that made up for this deficiency of Dimitriadis, and it therefore reversed the rejection. See page 13, lines 9-26 of the Decision on Appeal. Nor has the Examiner identified any such teaching or suggestion from Hite. In fact, the Examiner's rejection of claim 26 that begins on Page 5 of the final Office Action does not even appear to address the above-quoted limitation at all.

Appellant have previously presented the substance of the above discussion to the Examiner. In response, the Examiner at Page 3 of the final Office Action asserts that "claim 26 never recites that **the audio content sent to the vehicle radio includes the received radio broadcast together with the inserted advertisement.**" (Emphasis in original.) Appellant disagrees. Claim 26 recites "a second one of the radio broadcast streams including audio content that contains intermittent advertising slots each identified by a marker contained with that broadcast stream" and "said advertising control unit is operable to access one of the stored radio advertisements, with the accessed radio advertisement being inserted into the advertising slot identified by the received marker so that the accessed radio advertising is included within the audio content sent to the input of the vehicle radio." (Emphasis added.) Thus, the claim specifies that the audio content sent to the vehicle radio includes the received radio broadcast

together with the inserted advertisement and, as discussed above, this limitation is not taught nor rendered obvious by either of the references, whether considered singly or in combination.

Accordingly, Appellant requests Board action to overturn the rejection of claims 26-42.

#### Claim 31

Claim 31 depends from claim 26 and should be allowed on the same basis as discussed above in connection with claim 26. Claim 31 is also separately patentable since it specifies that "the radio broadcast receiver is connected to the input of the vehicle radio and wherein the advertising control unit is operable to supply the accessed radio advertisement to the radio broadcast receiver for insertion into the audio content by the radio broadcast receiver." As noted above, in the system of Dimitriadis, as indicated by its Fig. 2, the advertising is sent to the speaker amplifier 68 independently of the received voice broadcast. It is not sent to the radio receiver 64. Nor is there anything from Hite that would suggest such a modification.

#### Claim 32

Claim 32 depends from claim 31 and should be allowed on the same basis as discussed above separately in connection with those claims. Claim 32 is also separately patentable since it specifies that "said radio broadcast receiver is operable to provide the markers to said advertising control unit, and said advertising control unit is operable in response to receiving one of the markers to access one of the radio advertisements and supply the accessed radio advertisement to the radio broadcast receiver." This approach to using an advertising control unit to supply a radio advertisement to a radio broadcast receiver is not disclosed by Dimitriadis, nor does Hite disclose anything that would provide one of ordinary skill in the art any reason to so modify Dimitriadis' system.

#### Claim 33

Claim 33 depends from claim 26 and should be allowed on the same basis as discussed above in connection with that claim. Claim 33 is also separately patentable since it specifies that "the radio broadcast receiver is coupled to the input of the vehicle radio by the advertising control unit such that the first and second radio broadcast streams are sent by the radio broadcast

receiver to the advertising control unit, and wherein the advertising control unit is operable to store on the recording device at least some of the radio advertisements contained in the first radio broadcast stream, and is further operable to monitor the second radio broadcast stream for the markers and to insert the accessed radio advertisement into one of the advertising slots following receipt of the marker that identifies that advertising slot." An example of this construction is shown in Appellant's Fig. 3 wherein the advertising control unit 24 is interposed between the radio broadcast receiver 18 and the vehicle radio 20. Dimitriadis does not disclose such an approach. Nor does Hite provide any teaching by which such a modification of Dimitriadis' system would have been obvious.

### Conclusion

In view of the foregoing, Appellant respectfully submits that the rejection of claims 26-42 over the combination of Dimitriadis and Hite is improper and should be overturned.

The Commissioner is hereby authorized to charge any deficiencies, or credit any overpayment associated with this appeal brief to Deposit Account No. 07-0960.

Respectfully submitted,

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Date: April 12, 2010  
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**(viii) Claims Appendix****1-25. (Canceled)**

26. A radio system for a vehicle to provide broadcasted radio programming and advertising content to an occupant of a vehicle, comprising:

a vehicle radio having an input for receiving audio data and at least one output for providing audio signals representative of the received audio data;

a radio broadcast receiver having an antenna for receiving two or more radio broadcast streams, with a first one of the radio broadcast streams including radio advertisements and a second one of the radio broadcast streams including audio content that contains intermittent advertising slots each identified by a marker contained with that broadcast stream, the radio broadcast receiver being coupled to the input of the vehicle radio to provide the vehicle radio with the received audio content; and

an advertising control unit connected to said radio broadcast receiver to receive at least some of the radio advertisements contained in the first radio broadcast stream, said advertising control unit including a recording device which stores radio advertisements received from said radio broadcast receiver;

wherein, upon receipt of one of the markers contained within the second broadcast stream, said advertising control unit is operable to access one of the stored radio advertisements, with the accessed radio advertisement being inserted into the advertising slot identified by the received marker so that the accessed radio advertising is included within the audio content sent to the input of the vehicle radio.

27. The radio system as defined in claim 26, wherein the vehicle radio and radio broadcast receiver are integrated together as a single unit.

28. The radio system as defined in claim 26, wherein the vehicle radio, radio broadcast receiver, and advertising control unit are integrated together as a single unit.

29. The radio system as defined in claim 26, wherein said recording device comprises a digital storage device.

30. The radio system as defined in claim 26, wherein said digital storage device comprises random access memory.

31. The radio system as defined in claim 26, wherein the radio broadcast receiver is connected to the input of the vehicle radio and wherein the advertising control unit is operable to supply the accessed radio advertisement to the radio broadcast receiver for insertion into the audio content by the radio broadcast receiver.

32. The radio system as defined in claim 31, wherein said radio broadcast receiver is operable to provide the markers to said advertising control unit, and said advertising control unit is operable in response to receiving one of the markers to access one of the radio advertisements and supply the accessed radio advertisement to the radio broadcast receiver.

33. The radio system as defined in claim 26, wherein the radio broadcast receiver is coupled to the input of the vehicle radio by the advertising control unit such that the first and second radio broadcast streams are sent by the radio broadcast receiver to the advertising control unit, and wherein the advertising control unit is operable to store on the recording device at least some of the radio advertisements contained in the first radio broadcast stream, and is further operable to monitor the second radio broadcast stream for the markers and to insert the accessed radio advertisement into one of the advertising slots following receipt of the marker that identifies that advertising slot.

34. The radio system as defined in claim 26, wherein said advertising control unit is operable to select one or more of the received radio advertisements using advertisement data that accompanies each of the radio advertisements received by the radio broadcast receiver.

35. The radio system as defined in claim 34, wherein said advertising control unit is operable to store the selected radio advertisements on said recording device.

36. The radio system as defined in claim 34, wherein the advertisement data contains selection data used by the advertising control unit to select among the received radio advertisements.

37. The radio system as defined in claim 36, wherein the selection data includes primary selection data and secondary selection data and wherein said advertising control unit is operable to select and store certain ones of the different radio advertisements using the primary selection data, and is further operable to select one of the stored radio advertisements using the secondary selection data and to then access that stored radio advertisement for insertion into the audio content sent to the input of the vehicle radio.

38. The radio system as defined in claim 37, wherein the advertising control unit is operable to store each of the secondary selection data with its associated radio advertisement in the recording device.

39. The radio system as defined in claim 34, wherein said advertising control unit contains stored vehicle data and is operable to select one or more of the received radio advertisements using the advertisement data and the stored vehicle data.

40. The radio system as defined in claim 34, wherein said advertising control unit contains stored user data and is operable to select one or more of the received radio advertisements using the advertisement data and the stored user data.

41. The radio system as defined in claim 40, further comprising a vehicle communications device connected to said advertising control unit to provide said advertising control unit with the user data.

42. The radio system as defined in claim 34, further comprising a vehicle communications device operable to transmit identification data received from the first radio

broadcast stream that uniquely identifies the accessed radio advertisement from among the other radio advertisements.

43-45. **(Canceled)**

**(ix) Evidence Appendix**

None.



**(x) Related Proceedings Appendix**

None.